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### ABSTRACT

This project was designed to change education by changing the learning process in the training of future teachers. Twenty-five college juniors worked in the Kennebunk and Kennebunkport schools all day, every day for a full school year. Each trainee was assigned to a classroom teacher, who became his tutor. Instructors from the university came to the public school each week, on a regular basis, to present the necessary theory and background information to the trainees. Students received up to 30 college credits in methodology for the year. They were allowed to work at different grade levels. The project attempted to involve the university and the student in a partnership. Its main objectives were as follows: a) to bring about change in the present method of preparing teachers through extended participation by trainees in public school classrooms; b) to utilize better the resources of the university for the public school by having the university directly involved in a cooperative project; and c) to exchange ideas between the public school practitioner and the university instructor. (Authors/JA)



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SUMMATIVE REPORT

OF

COOPERATIVE TEACHER

EDUCATION PROGRAM

1972 - 1973

TITLE III PROJECT
P. L. 89 - 10
Project #29-73-0303-0

ROBERT J. DRUMMOND MAURICE LITTLEFIELD



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The Context: School Administrative District #71

The town of Kennebunk and Kennebunkport are located in York County on the coast of Mine, midway between Portsmouth, New Hampshire and Portland, Maine.

During the era of the great sailing vessels the two communities were famous for shipbuilding and world trade.

The rugged beauty of the Maine coast, the sandy beaches, a low population density, a close proximity to metropolitan Boston, and easy access to major ski areas have caused an "in-migration" of people from out of state, especially during the past decade. The nature of this population growth has caused the two communities to take on the typical characteristics of a suburban area.

Previous to 1948, both communities maintained their own elementary and secondary schools as part of the then traditional School Union system. During that year, Kennebunkport closed its high school and transported its secondary school pupils to Kennebunk. In 1968 the two communities were organized into Maine School Administrative District Number 71. The District's policies are formed by a ten-member Board of School Directors; six Directors from the Town of Kennebunk and four from the Town of Kennebunkport. There are five separate school facilities in the District. Currently, the administrative staff includes:

Superintendent of Schools, Mr. Arthur K. Hedberg, Jr.

Assistant Superintendent of Schools, Mr. Leo G. Martin

School Principal, Park Street Elementary School, Mr. Leo G. Martin

High School Principal, Mr. Robert Perkins

High School Assistant Principal, Mr. Spencer Trask

Middle School Principal, Mr. Daniel Calderwood

Consolidated Elementary School Principal, David Potter

Head Teacher, Cousens School, Albert Meserve



There are one hundred and five classroom teachers; forty-two are assigned to the high school, and sixty-three to the elementary school. The school system also employs teacher aids, library aids, and teacher assistants.

Current enrollment in the School District totals 2,127; 1,477 elementary school pupils and 650 high school pupils.

The elementary schools in the District apply a variety of teaching styles at each level of instruction. The individual needs of the child permeate the total philosophy of the school. Hence, a considerable emphasis is placed upon individualizing the learning situation. Currently the teaching-learning process in the elementary schools employs the concept of the integrated day, team teaching, activity-centered classrooms, and the non-graded experience.

The 1972-73 operating budget for the District totaled \$1,882,306.



### SCOPE OF PROGRAM

The Cooperative Teacher Education Program if funded for the rull period will extend over three years. The program will provide a model for teacher training which can be adapted or adopted by other colleges and universities and school districts. The approach provides examples of how the classroom can become a true laboratory for the teacher trainee to put his theory into practice.

Continued self-evaluation takes place through the functioning of a representative council comprised of the project directors, interns, class-room teachers and university professors. Outside evaluations by the external evaluators and Title III on-site visitiation are also used to help modify the program.

The program directions during 1973-74 will focus on curriculum revision in the teacher training program based upon needs seen during the first year of operation. Greater interaction will be sought between the classroom teachers and university personnel engaged in the program. Micro-teaching for self-critiquing by the interns, as well as critiquing with and by their classroom teacher will be emphasized more during the second year of the project. Expanded use of team teaching techniques and differentiated staffing techniques, involving the interns, will also be iniated.



### PERSONNEL

### The Staff

#71 school system and the University of Maine at Portland-Gorham. The project directors came from both sources. Two of the directors were from S.A.D. #71.

Leo Martin and Daniel Calderwood were from the school system while Melissa Costello represented the University of Maine at Portland-Gorham. Leo G. Martin is Assistant Superintendent of S.A.D. #71 and principal of Park Street Elementary School. Daniel Calderwood is principal of Kennebunk Consolidated School. Melissa Costello is chairman of the department of elementary education at Portland-Gorham.

The roles of the S.A.D. #71 directors were to supervise and coordinate L.E.A. staff and university students as well as to help instruct the students, act as a liaison between the L.E.A. and university, and help administer the program. The university representative supervised and coordinated the university staff, and helped act as a liaison between the university and L.E.A. as well as working with the trainees and teachers.

Twenty-five classroom teachers were committed to the project to help train the students. Their role was to supervise the daily laboratory experiences of the students, to counsel them and to help them transcribe educational theory into practice.

A business agent was hired during the year to enable the superintendent the adminstrative assistant and the elementary principals to have more time to spend on the project activities such as in curriculum and supervision. The salary was paid by the project for the business agent but the position was not filled to the middle of the school year.

The other staff members were regular staff members who either as part of their assignement or through donated overload traveled to Kennebunk to offer the various method and other courses required by the University for teacher education candidates.



# The Interns

Twenty-one of the 25 interns replied to the questionnaire in June. Of these fifteen were female and six male. Thirteen reported they were seniors, six juniors, and two post-graduates. Six checked they had a "C" average, 13 a "B" average and one an "A" average at UMPG. Two of the group reported their major interest was nursery school or kindergarten; 8, grades one or two; 8, grades three, four or five; and 2, middle school, grades six, seven and eight.

Eighteen of the 21 answering the questionnaire stated that they had made their decision about becoming a teacher and were very sure of their decision. Three of the group replied that they had not made their decision about being a teacher but intended to soon.

### BUDGET

The proposed budget for the 1972-73 school year is summarized in Table 0. Modifications were made in the budget since the business manager was not hired until the middle of the school year. More funds were alloted to contracted services for evaluation.



TABLE 0
Budget for 1972 - 73

Category	Amount
Administration	\$ 500.00
Contracted	Services
Instruction	
Professional	7,000.00
Non professional	11,500.00
Contracted Services	500.00
Materials and Supplies	2,000.00
Travel	4,700.00
Other	500.00
Capital Outlay	
Equipment	3,000.00
Total	29,700.00



### EVALUATION OF THE FIRST YEAR

In this section the evaluation data for each objective is presented.

Additional supportive information not a part of the original design is also included.

### Objective I

By the end of one project year, the pupils of the L.E.A. naving a teacher trainee assigned to the classroom for one year in grades 4,5,6 will show at the 1,2,3 quartile of an administered Stanford Achievement Test a 10% greater growth from previously administered SAT than will those pupils at the same grade level who do not have a teacher trainee.

The Stanford Achievement Test, 1964 edition is administered to all students in the district as a part of the regular school testing program. The third graders complete the Primary II form of the test; the fourth graders, Intermediate I; the fifth and sixth graders. Intermediate II.

The <u>Primary I battery</u> of the <u>SAT</u> contains the following subtests:
"Word Meaning," "Paragraph Meaning," "Social Studies Science Concepts,"
"Spelling," "Word Study Skills," "Language," "Arithmetic Computations," and
"Arithmetic Concepts." The <u>Intermediate I</u> Battery contains the same subtests
except that "Science" and "Social Studies" became separate subtests. One
additional arithmetic test is also included, "Arithmetic Applications."
The <u>Intermediate II</u> bettery contains all of the subtests previously mentioned except for the "Word Study Skills."

The Lorge-Thorndike Intelligence Test is also administered to third and sixth graders. The test yields a Verbal, Non-verbal and total intelligence quotient.

The analysis suggested by the statement of the objectives was modified to fit the information available. Suggestions for modification of this objective will be included in the Recommendations Section.



The battery median score on the <u>SAT</u> was used as the indicator of achievement for the fourth and fifth grade groups. Students were assigned to quartiles based upon their performance on the SAT the previous year. The gain scores were computed and the non project and project classrooms were compared using chi square analysis. The gain scores were forced in a dichotomy, less than a year gain and a year or more gain on the achievement test. This statistical analysis was used because the achievement tests were not administered the same time at both schools and the same norms were not used.

# Fourth Grade

The chi square analysis for the four quartiles on the <u>SAT</u> Battery Median is presented in Table I.

TABLE I

Comparison of Battery Median Gain Scores on the Starford
Achievement Test of Students from Project and Non-Project
Fourth Grade Class coms

Quartile	Chi square	Significance
Upper	2.514	NS
Second	.5603	NS
Third	.001	NS
Lower	1.944	NS

Gain was independent of type of classroom on the fourth grade group. None of the chisquares computed was significant at the .05 level. With students in the lower quartile, the gain from 1972 to 1973 ranged from .5 to 2.2 with the median of 1.0 for the project group; -.1 to 4.4 for the non project group with the median of .7. For the second quartile project students the range of gain scores on the <u>SAT</u> was .4 to 1.8 with a median score of 1.1. The range for non project students was .1 to 2.1 with a median score of .9.



For the third quartile project students the range of gain scores on the SAT was .5 to 1.8 with a median gain score of 1.2. The range for non project students wer from .5 to 2.0 with a median gain score of 1.2.

For the upper quartile project students the range was -.7 to 2.3 with a median gain score of 1.5. For the non project students the range of gain scores on the <u>SAT</u> was .0 to 2.2 with a median gain score of 1.1.

# Fifth Grade

The chi square analysis for the four quartiles of the SAT gain scores on the Battery Median is presented in Table II.

Comparison of Battery Median Gain Scores on the Stanford
Achievement Test of Students from Project and non project
Fifth Grade Classrooms

Quartile	Chi square	Significance
Jpper	.0487	NS
Second	6.458	•05
Phird	11.25	.001
Lower	1.607	ns

Two significant chi squares were found when comparing the project and non project students. Gain in these two instances were dependent upon type of classroom.

In the upper quartile 38% of the project group made more than a year gain on the <u>SAT</u> using battery median as the composite score while 35% of the non project group did.

The range for the project group was -.9 to 1.9 with a median gain of .8. The range for the non project group was -.7 to +3.1 with a median gain of .6.

The second quartile analysis showed that there was a greater number of project students than non project who showed gain of more than one year.



Over 90% of the project group gained a year or better to 10% of the non project students. The range of the project group was 1.2 to 2.5 with a median score of 1.5. The range of the scores of students not having student teachers during the year was .0 to 1.1 with a median gain of .7.

Twice as many third quartile project students than non project students, 64% to 32% showed a gain of one year or better on the composite battery median test. A chi square of 11.25 was significant at the .001 level. The range of project students was .0 to 1.9 with a median of 1.0. For the non project group the range was -.3 to 2.3 with a median of .9.

For the lower quartile project students the range was .3 to 1.4 with a median of .9, and for the non project students a range of .8 to 2.0 with a median of 1.0. More students from non project classrooms showed gain of a year or more than those from project classrooms; however, the chi square was not significant.

### Third Grade

Since the achievement testing program in the school district starts at the end of the third grade, a comparison with previous achievement test was impossible. Secondly, the achievement tests were not given at the same time in all of the third grade classes. Several recommendations concerning the testing program and statement of objectives will be included in the Recommendations section.

The comparison of the third grades on the Primary II level of the <u>SAT</u> will be presented in Table III.



TABLE III

Means and F Comparisons of the Third Grade on the Primary II level of the SAT

Subtest	Kange		Teachers	Non <b>p</b> rojec R <b>ange</b> of X	t Teachers	F
Word	3.7 -	4.6	4.2	3.8 - 4.1	4.0	1.94
Paragraph	3.6 -	4.6	4.1	3.7 - 4.1	3.9	1.95
Science/Soc.St.	3.9 -	4.7	4.1	3.7 - 4.1	3.9	1.72
Spelling	3.8 -	4.4	3.9	3.7 - 3.7	3.7	1.90
Word Study	4.0 -	5.1	4.7	4.7 - 5.0	4.8	1.12
Language	3.6 <b>-</b>	4.9	4.3	3.6 - 4.2	3.9	3.62*
Arithmetic Comp.	3.2 -	4.1	3.5	3.3 - 3.4	3.35	3.34*
Arithmetic Conc.	3.6 -	4.7	4.2	3.7 - 4.4	4.0	2.63*
Battery Median	3.9 -		4.1	3.8 - 4.0	3.9	2.33*

teachers for each of the subtests. The differences in each case where there were significant "F" s were between one of the project teachers where the tests were given about a month later and a few other classes both project and non project. The results must be viewed with caution since the testing time was not the same in all cases. Other factors such as the entry level of the students, experience of the teacher, the scholastic aptitude and attitude of the teacher, among many other factors, might have influenced the results. It is interesting to note, however, that the range of achievement was greater in all cases with project teachers and that the median achievement was higher for project classrooms than non project on all but one of the subtests.

# Sixth Grade

Complete achievement and acholastic aptitude test data was not available at the time of the writing of the summative report to make a complete analysis of the achievement of the project and non-project sixth grade classes. Preliminary inspection of the data would indicate no major differences between the two groups. The project classrooms using the battery median score on the SAT as a composite



score of achievement had medians of 6.8, 6.8, 7.6 and 8.0. The median would be 7.3. The non-project classrooms had medians of 7.0 and 8.1. The median would be 7.6.

# Objective Two

By the end of one project year in grades 1-7, sixty percent of the pupils of the LEA having a teacher trainee assigned to their classrooms for one year will, by a LEA -- University developed survey instrument, be able to compare the project year with baseline data established in September of the project year, finding the project year more enjoyable and rewarding to the individual pupil due to the pupils' identification and relationship to the additional (teacher-trainee) adult assigned to his classroom.

An attitude scale was developed and administered to grades 1 to 7 to a sample of students in project teachers' classrooms. The forty item questionnaire is included in Appendix A of this report.

Students responded anonymously to the scale. For this project year non project class groups were not used as a control group. The comparison of student responses in September and June by grade is presented in Tables IV to X. Percentages are reported and are rounded off to the nearest whole number. Therefore, in some cases, the total percentage for an item might be less than or greater than 100%.



A review of the items by grade indicates no major change in attitude took place from September to June. There are some minor changes within grade levels and certain major differences between grades. A selection of items relating specifically to the project objectives will be reviewed by grade.

Grade One (See Table IV)

There were a number of items relating to the student's attitude toward school and school subjects. There were no major changes to how the first graders liked school. About ninety per cent reported they liked school both in September and June. Their attitude toward school subjects improved during the year. For example 48% reported "always" liking reading in September to 55% in June; 45% "always" liking science in September to 51% in June; 35% to 47% for math; 55% to 63% for art; and 61% to 72% for playground. The percent "never" worrying in school increased from 45% to 61%.

There were several items relating to the adults in the classroom. For example 1% of the group stated they "never" get confused by having more than one grown up in the rom in September while 65% checked "never" in June. The percentage replying "always" to would like to have more than one grown up in my room" increased from 41% in September to 57% in June. The same trend was also true of the responses to "grown ups are trying to help me." Fifty- three percent checked "always" in September and 68% in June.

## Second grade (See Table V)

In general the attitude toward school as expected was slightly less enthusiastic than first grade but still very positive. The percentage replying to "never" liking school increased from 5% in September to 12% in June. Art is the subject most positively received. Only one percent both in September and June replied "never." The attitude toward other subjects shifted slightly. In looking just at the "never" category, reading changed from 11% to 10%; science from 10% to 22%; math, from 9% to 17%; social studies, from 14% to 15%.



Comparison of First Graders September and June Responses on School Attitude Scale

ITEM  N = 64 September  N = 111 June	NEVER	ER S	S ONE!	Sometimes % % S	<i>β</i> ε Ω < '1	LOI L	AIWAYS % S	YS G 24
1. I like school.	77	10	23	28	22	17	1,5	54
2. Grown-ups pay attention to me in school.	H	٣	38	84	77	15	38	34
3. My teachers understand me.	8	٦	28	56	50	15	51	58
μ. I like reading.	a	9	17	22	33	16	84	55
5. I like science.	14	7	22	59	20	15	54	12
6. I like math.	<b>†</b> Γ	2	28	·6 <del>1</del> 1	23	17	35	Lη
7. I like social studies.	9	6	91	35	38	15	Ľή	77
8. I like art.	5	7	15	נו	25	20	55	63
9. I like playground.	m	0	13	11	23	16	19	72
10. Grown-ups talk with me.	11	.m	143	15	17	12	29	3,4
11. I get along better at school than home.	15	N	39 .	14	15	11	31	01
	m	30	56	35	19	80	52	58
	m	ุณ	32	Ľή	19	20	94	37
14. I like to play sports.	20	6	17	75	141	97	61	62
	14	16	19	30	52	91	94	38



ITEN' N = September N = June	. AS (0)	NEVER	ა გ. თ <u>წ</u>	SOMETIMES	<i>₽</i> ≈ Ω ∢	LOT % J	ALI S	ALWAYS
16. I like to dance.	34	太	27	56	13	2	12	15
17. I like to cook.	25	13	23.	30	13	20	39	37
18. I am allowed to cook.	39	31	33	50	13	9	<b>J</b> 6	13
19. I eat breakfast.	a	က	20	5₽	17	13	61	9
20. I eat most of my lunch.	a	ч	17	37	22	15	58	24
21. I play with other children at recess.	5	N	28	33	17	13	20	52
22. I like to do jobs for the teachers.	જ	0	6	18	17	10	72	77
23. I think grown-ups are trying to help me.	9	m	17	16	23	12	53	89
24. I would like to have more than one grown-up in my room.	14	6	58	21	17	12	1	53
25. I worry in school.	45	19	36	33	٣	r-i	97	5
26. Saturday and Sunday are my favorite days.	m	<b>t</b>	27	17	16	13	55	65
27. My stomach feels funny in school.	71	50	34	43	೮	٣	17	<b>†</b>
28. I feel like crying in school.	15	11	50	7₹	0	0	. 2	0
29. I am afraid in school.	48	68	13	11	0	0	6	0
30. I bite my fingernails in school.	<del>1</del> 9	11	23	19	N	8	Ħ	П
31. I wish I had more help with my work.	21	25	84	55	11	77	73	16

TABLE IV (cont.)

Mant			VER	MOS	SOMETIMES	A	LOT	AI	ALWAYS
N N N	= September = June	O. Ac	<i>286</i> €	ಬ ಕ	28.01	ಬಿಕ್	<i>₽8</i> €	ಬ ೩೯	12 FE
32. I wish	I wish someone would listen to me.	17	13	₹.	50	11	10	38	27
	In school I daydream.	19	<b>L</b> 4	23	717	α	<b>1</b>	ω	9
	I am afraid of grown-ups.	11	16	77	6	αı	0	9	0
	I am afraid of children.	89	8	89	6	8	0	α	Н
	I am afraid of women.	88	88	п	य	ณ	8	N	0
	I am afraid of men.	78	83	19	7.7	0	Ŋ	3	Н
	I am afraid to go to the store.	8	88	9	0/	m	н	2	a
	I oversleep in the morning.	31	30	45	64	9	70	17	Ħ
40. I get c grown-u	I get confused by having more than one grown-up in my room.	39	65	36	32	ω	N	17	r=4



Comparison of Second Graders September and June Responses on School Attitude Scale

ITEM N = 107 September N = 111 June	NE S S	NEVER	S & S	Sometimes % % S	% N A	LOT ,3 J	ALWAYS % S	AYS , J
1. I like school.	5	टा	38	04	22	.23	35	25
2. Grown-ups pay attention to me in school.	m	7	141	59	29	20	27	17
3. My teachers understand me.	ч	8	39	39	18	30	64	30
$h_{ullet}$ I like reading.	דד	9	76	27	39	30	₹	33
5. I like science.	10	22	23	30	34	22	59	55
6. I like math.	9	17	17	56	56	22	51	36
7. I like social studies.	<b>7</b> 7	15	75	37	28	21	91	52
8. Ilike art.	ч	н	12	16	22	54	65	09
9. I like playground.	9	ď	†T	50	22	19	59	09
10. Grown-ups talk with me.	7	נו	64	24	35	56	6	16
ll. I get along better at school than home.	36	45	94	37	ω	9	11	12
12. I get along well with other kids.	<b>4</b>	8	26	19	22	25	18	12
13. I understand my school work.	m	4	55	53	16	30	56	14
14. I like to play sports.	δ	10	91	17	17	13	58	9
15. I like to sing.	19	30	30	35	19	17	33	25



TABLE V (cont.)

ITEM N = September N = June	N 26 N	Never % 5	ପ୍ର <i>୬</i> ଟ ପ M	Sometimes % % S	ÆΩ ∢	LOT %	A & S	AIWAYS
16. I like to dance.	37	145	33	31	13	17	17	01
	11	10	20	22	19	50	17	617
18. I am allowed to cook.	30	17	14	61	п	10	18	75
19. I eat breakfast.	ĸ	,o ·	13	50	Ħ	6	47	17
20. I eat most of my lunch.	4	m	35	14	19	56	γ <sub>4</sub> 3	31
H	5	5	35	25	23	23	38	91
Н	6	6	19	12	50	21	53	143
23. I think grown-ups are trying to help me.	9	7	50	2h	5ħ	77	51	94
нН	10	13	28	25	7	T3	55	50
25. I worry in school.	54	39	35	20	8	9	1	9
	20	8	21	21	п	12	84	09
27. My stomach feels funny in school.	36	56	53	9	9	4	9	33
	58	58	38	39	2	8	3	N
Н	92	78	22	21	٦	ч	Н	п
30. I bite my fingernails in school.	70	<del>1</del> 9	20	30	8	m	6	4
	16	22	55	9	7	8	23	10



TABLE V (cont.)

Manut		TEVER	Nos	SOMETIMES	Α.	LOT	ALWAYS	AYS
N = September N = June	ഗ ക <sub>്</sub>	286	સ ક્ર	D 86		عه وم	ಬ.4≈	P 50
32. I wish someone would listen to me.	8	п	37	54	12	19	43	3:6
33. In school j daydream.	84	44	30	141	8	0	17	9
34. I am afraid of grown-ups.	73	62	54	36	0	ч	4	7
35. I am afraid of children.	†8	91	91	5h	0	0	0	0
36. I am afraid of women.	75	4	۲ć	12	2	0	κı	0
37. I am afraid of men.	58	95	33	04	†	ю	9	Ŋ
38. I am afraid to go to the store.	81	75	16	23	0	ч	$\kappa$	٦
39. I oversleep in the morning.	30	28	04	91	9	7	25	19
40. I get confused by having more than one grown-up in my room.	58	95	33	33	m	9	7	9



1

There were several items relating to adults in the classroom. Over half of the students both in September and June stated that they "never" get confused by having more than one grown up in their room (58% S, 56% J). Only about ten percent replied that they "never" wanted more than one grown up in their room (10% S, 13% J). Over half replied "always" to this item (55% S, 50% J). Over 90% both in September and June checked that teachers understand them (99% S, 98% J); the same pattern held for grown ups are trying to help me (94% S, 95% J); likewise, 94% in September and 93% in June said that grown ups pay attention to them.

Third Grade (See Table 6)

The same trend appeared to hold for third grade. Only 6% stated never in September compared to 5% in June to "never" liking school. The percentage checking liking "a lot" declined from 27% in September to 15% in June though. The attitude toward school subjects had a mixed pattern; the same percentage both in September and June tended to reply "never" to liking art (3% S, 3% J) and playground (1% S, 0% J). More students replied "never" in June to reading (7% S, 10% J), math (14% S, 25% J), and social studies (15% S, 26% J). The opposite pattern was true for science (14%S, 7% J).

Students preferred to have more than one grown-up in their room. Twentynine percent reported "never" in September as compared to 43% in June. The
change is also reflected in the "always" category, twenty-nine percent in
September to forty-three percent in June. A greater percentage in June than in
September reported that they "never" got confused by having more than one
grown-up in their room.

# Fourth Grade (See Table VII)

The intensity of the student's positive attitude toward school changed slightly from September to June. Ten percent replied "never liking school" in September as compared to six percent in June. The percentage replying always dropped from 19% to 12%. Very little change was noted in bow students.



TABLE VI

Comparison of Third Graders September and June Responses on School Attitude Scale

ITEM N = 117 September N = 95 June	NE S	NEVER	S & SOME	SOMETIMES & S	& S A	LOT	AIWAYS % S	YS %
1. I like school.	9	5	54	<i>L</i> 9	2.5	15	7.7	13
2. Grown-ups pay attention to me in school.	٦	89	<del>1</del> 9	95	23	55	य	15
3. My teachers understand me.	9	8	45	52	27	56	21	50
4. I like reading.	7	0:	32	30	33	37	29	23
5. I like science.	17	7	29	34	67.7	31	28	28
6. I like math.	14	25	37	71	25	20	54	7
7. I like social studies.	15	56	35	38	56	22	54	10
8. I like art.	m	3	13	15	33	25	51	23
9. I like playground.	н	0	13	17	34	18	52	65
10. Grown-ups talk with me.	77	9	65	50	22	32	6	13
ll. I get along better at school than home.	51	45	39	ተተ	7	7	3	٣
12. I get along well with other kids.	4	3	94	84	56	31	54	18
13. I understand my school work.	3	N	62	63	22	52	75	10
14. I like to play sports.	ω	ι.	21	56	54	26,	34	742
15. I like to sing.	17	18	37	37	27	18	19	22

TABLE VI (cont.)

ITEM N = September N = June	≥6 W	NEVER	Ω <i>≥ς</i> Ω	Sometines % % S	& Ω ∢	LOT A J	AI.	AIWAYS % J
16. I like to dance.	50	24	24	36	13	5	13	12
17. I like ta cook.	13	7	33	23	25	25	30	45
18. I am allowed to cook,	₹Z	15	19	59	6/	12	9	15
19. I eat breakfast.	N	н	19	17	10	50	69	61
20. I eat most of my lunch.	н	N	37	45	27	18	35	35
21. I play with other children at recess.	0	0	25	31	31	32	44	37
22. I like to do jobs for the teachers.	9	at-	27	28	56	59	Ltt	39
23. I think grown-ups are trying to help me.	4	7	34	23	31	27	32	45
24. I would like to have more than one grown-up in my room.	17	€	39	37	15	15	29	4.3
25. I worry in school.	36	7Z	51	09	7	13	9	3
26. Saturday and Sunday are my favorite days.	m	4	25	34	17	16	58	<del>91</del>
27. My stomach feels funny in school.	34	35	54	84	<b>4</b>	11	۲.	9
28. I feel like crying in school.	99	. 29	32	36	m	0	0	8
29. I am afraid in school.	80	73	19	25	c۷	0	0	8
30. I bite my fingernails in school.	62	45	28	36	2	7	<b>4</b>	75
31. I wish I had more help with my work.	18	17	62	99	0,	8	70	80



TABLE VI (cont.)

TOPM			EN	/EH	SOME	SOMETIMES	Ą	A LOT	AI	AIWAYS
777	11 11 K K	September June	00 AS	280	0 8c	286	ಬ ಕ	<i>28.</i> Cu	N 25	ہے و
32.	I wish someone wo	I wish someone would listen to me.	6	ھ	50	61	20	12	21	19
33.	In school j daydresm.	•вш•	70	35	<b>†</b> †	9†	9	ה	σ	ω
34.	I am afraid of grown-ups.	.own-ups.	19	19	35	28	ю	N	н	ณ
35.	I am afraid of children.	illdren.	62	11	19	23	ત્ય	0	0	0
36.	I am afraid of women.	men.	89	80	22	19	н	ч	m	0
37.	I am afraid of men.	•ue	94	43	917	51	9	m	m	m
38.	I am afraid to go to the store.	o to the store.	<del>1</del> 8	83	17	15	5	0	ч	8
39.	I oversleep in the morning.	ne morning.	28	28	55	51	9/	12	80	70
<sup>1</sup> 40.	I get confused by hagrown-up in my room.	I get confused by having more than one grown-up in my room.	58	63	38	32	н	a	m	m

TABLE VII

Comparison of Fourth Graders September and June Responses on School Attitude Scale

ITEM N = 75 September N = 80 June	NEVER % S	SR % J.	SOMETIMES & S	IMES %	% N A 11	LOT ,	AIWAYS % S	fS J
1. I like school.	10	9	64	55	23	98	19	12
2. Grown-ups pay attention to me in school.	80	Н	64	44	18	742	25	13
3. My teachers understand me.	80	4	34	45	38	34	20	17
h. I like reading.	10	6	31	32	56	35	34	2ħ
5. I like science.	5	9	19	. 41	30	31	91	22
6. I like math.	18	15	29	23	52	35	32	27
7. I like social studies.	8	80	53	94	91	30	23	16
8. I like art.	0	ч	10	18	37	29	53	51
9. I like playground	н	ď	77	16	54	28	49	54
10. Grown-ups talk with me.	9	5	99	58	23	31	15	9
11. I get along better at school than home.	<b>†</b> †	45	14	44	m	6	12	N
12. I get along well with other kids.	4	0	35	70	34	7,12	. 27	18
13. I understand my school work.	3	ч	742	84	35	44	20	7
14. I like to play sports.	3	Ŋ	19	17	14	22	49	59
i5. I like to sing.	17	10	37	43	23	15	27	33



TABLE VII (cont.)

N =   September									
11ke to dance.	# # K K	<i>₽</i> € W	æver % J	ಬ ೫ ಬ ಲ್ಲ	ETIMES L	₽5 CX	LOI	A 85° R3	ALWAYS
Inthe to.cook.  I am allowed to cook.  I am allowed to cook.  I eat breakfast.  I eat breakfast.  I eat most of my lunch.  I play with other children at recess.  I play with other children at recess.  I think grown-ups are trying to help me.  I would like to have more than one grown-up  I would like to have more than one grown-up  I worry in school.  I worry in school.  I then grown school.  I was to mach feels funny in school.  I am afraid in school.  I am afraid in school.  I with I had core help with my work  I think grown with my work  I would like crying in school.  I with I had core help with my work  I am afraid in school.  I with I had core help with my work  I with work  I with with work  I with with work  I	н	31	39	39	31	17	100	13	22
I eat breakfast.  I eat most of my lunch.  I eat most of my lunch.  I eat most of my lunch.  I play with other children at recess.  I like to do Jobs for the teachers.  I like to do Jobs for the like to the teachers.  I like to do Jobs for the like to the teachers.  I like to do Jobs for the like to the teachers.  I like to do Jobs for the like to the teachers.  I like to do Jobs for the like to the like to Jobs for the like to Jobs	Н	16	70	31	20	5h	29	28	7,2
Teat breakfast.	н	18	97	09	51	14	25	10	6
I eat most of my lunch.  I play with other children at recess.  I play with other children at recess.  I like to do jobs for the teachers.  I like to do jobs for the teachers.  I think grown-ups are trying to help me.  I think grown-ups are trying to help me.  I would like to have more than one grown-up  I would like to have more than one grown-up  I worry in school.  Saturday and Sunday are my favorite days.  I worry in school.  Saturday and Sunday are my favorite days.  I feel like crying in school.  I feel like crying in school.  I am afraid in school.  I bite my fingernails in school.  I bite my fingernails in school.  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I had gove help with my work  I with I was a work  I with I had gove help with my work  I with I was a work  I was a wor	Н	7	н	14	22	18	11	ŧ9	99
I play with other children at recess.  1 like to do jobs for the teachers.  2 like to do jobs for the teachers.  3 like to do jobs for the teachers.  4 like to do jobs for the teachers.  5 like to do jobs for the teachers.  6 like to have more than one grown-up  7 like to have more than one grown-up  8 like to have more than one grown-up  8 like to have more than one grown-up  9 like to have more than one	н	ч	3	33	35	34	25	32	38
I think grown-ups are trying to help me.  1 think grown-ups are trying to help me.  1 think grown-ups are trying to help me.  1 would like to have more than one grown-up  1 would like to have more than one grown-up  1 uning room.  2	I play with other children at r	4	N	20	54	56	35	20	38
I think grown-ups are trying to help me.  I would like to have more than one grown-up  I would like to have more than one grown-up  I worry in school.  Saturday and Sunday are my favorite days.  Ny stomach feels funny in school.  Ny stomach feels funny in school.  I feel like crying in school.  I am afraid in school.  I bite my fingernails in school.  I with I had good with my work  I with I had good help with my work  I with work work  I with I had good with my work  I with work work work work work work work work	I like to do jobs for the teach	0	ч	80	23	77 77	31	68	45
I would like to have more than one grown-up in my room.       31       29       45       61       11       6         I worry in school.       32       27       45       61       11       6         Saturday and Sunday are my favorite days.       7       5       39       27       15       20         My stomach feels funny in school.       32       55       59       39       5       5         I feel like crying in school.       67       60       31       34       3       6         I bite my fingernalis in school.       16       45       36       33       7       15         I wish I had my fingernalis in school.       16       13       64       60       7       11	I think grown-ups are trying to	m	ч	15	33	25	54	58	142
I worry in school.       31       29       45       61       11       6         Saturday and Sunday are my favorite days.       7       5       39       27       15       20         My stomach feels funny in school.       32       55       59       39       5       5         I feel like crying in school.       67       60       31       34       3       6         I sm afraid in school.       61       68       33       28       4       0         I bite my fingernails in school.       14       45       36       33       7       15         I wish I had got of the my fingernails in wheth my work       16       13       64       60       7       15	I would like to have more than one in my room.	5	7	14	32	6	21	<b>†</b> ††	04
Saturday and Sunday are my favorite days.       7       5       39       27       15       20         My stomach feels funny in school.       32       55       59       39       5       5         I feel like crying in school.       67       60       31       34       3       6         I sm afraid in school.       61       68       33       28       4       0         I bite my fingernalis in school.       16       13       64       60       7       11		31	59	45	61	11	9	13	4
My stomach feels funny in school.       32       55       59       39       5       5         I feel like crying in school.       67       60       31       34       3       6         I sm afraid in school.       61       68       33       28       4       0         I bite my fingernails in school.       41       45       36       33       7       15       11         I wish I had sore help with my work       16       13       64       60       7       11       11	Saturday and Sunday are my favorite	7	5	39	22	15	20	04	64
I feel like crying in school.  I am afraid in school.  I bite my fingernails in school.  I wish I had sore help with my work  I wish I was a second with my work		32	55	59	39	5	2	4	. ਜ
I am afraid in school.  I bite my fingernails in school.  I wish I had sore help with my work  I wish I had sore help with my work  I wish I had sore help with my work		19	09	31	34	ĸ	9	0	0
I bite my fingernails in school.  I wish I had more help with my work	H	61	89	33	58	4	0	н	4
I wish I had some help with my work		141	45	36	33	7	15	. 91	8
	31. I wish I had more help with my work.	16	13	49	69	7	7.7	13	80

TABLE VII (cont.)

Medul	N.	N N	NEVER	SON	SOMETIMES	4	LOT	AL	ALWAYS
1	N = September N = June	1 750	ع4 در	ળ પ્ર	780	ಬ ಸ್ಥ	286	೧೯	D ₽€
32.	I wish someone would listen to me.	7	15	4.5	54	†₹	20	77⋜	10
33.	In school j daydream.	611	34	37	51	ω	13	7	m
34.	I am afraid of grown-ups.	59	†††	37	51	ю	5	ч	0
35.	I am afraid of children.	91	63	22	32	ч	5	ч	0
36.	I am afraid of women.	19	63	32	35	ч	ч	0	ч
37.	I am afraid of men.	51	15	39	41	4	ю	7	0
38.	I am afraid to go to the store.	73	47	22	23	ю	ю	ю	ч
39.	I oversleep in the morning.	32	33	84	84	11	11	6	6
40.	I get confused by having more than one grown-up in my room.	61	84	31	94	5	m	m	4



viewed school subjects. Art and playground were viewed most positively, ninety-nine percent or more liked these subjects both in September and June. Mathematics was most negative, 18% replied "never liking math in September and 15%, the same, in June. The dislike of other subjects remained about the same: Reading (5% S, 6% J), Science (5% S, 6% J), and Social studies (8% S, 8% J).

The attitude toward having more than one grown-up in the classroom was very positive; 44% stated "always" in September and 40% in June and only 5% reported "never" in September and 7% in June. A greater percentage reported they were "somewhat" confused by having more than one grown-up in the room, thirty-one percent in September and 46% in June.

Fifth Grade (See Table VIII)

Fifth graders were very positive in their attitude toward school.

Ninety-nine percent reported liking school to some degree in September as compared to 92% in June. Little change was seen in how the students viewed reading and science. Art was seen much more positively; fifty-three percent reported they liked art "always" in June as compared to 37% in September. The same trend held for social studies; 59% replied "always liking" in June to 28% in September. Math was viewed with mixed feelings. The percentage replying "never" declined from 16% to 8% but the percentage stating liking "always" declined from 25% to 18%.

The fifth graders were more positive in June than in September toward liking to have more than one grown-up in their room. Forty-seven percent said they "liked always" this as compared to 43% in September. The percentage replying "never" also declined from seven percent to two percent. Likewise the percentage of fifth graders reporting they "never" get confused by having more than one adult in the room increased from 68% to 82%.



TABLE VIII

Comparison of Fifth Graders September and June Responses on School Attitude Scale

ITEM N = 115 September N = 51 June	NEVER	SR A	Sometimes %% S	IMES % J	A LOT	لل مور ب	ALWAYS % S	در مع
1. I like school.	7	8	57	L <sub>4</sub>	31	39	10	9
2. Grown-ups pay attention to me in school.	<b>4</b>	Ŋ	62	51	27	33	ટ્ય	17
3. My teachers understand me.	0	0	4.	59	31	37	15	4
4. I like reading.	6	9	29	39	77	35	19	20
5. I like science.	10	9	28	18	35	24	27	છ
6. I like math.	16	80	38	53	22	22	25	18
7. I like social studies.	11	4	31	9	30	31	28	59
8. I like art.	10	a	50	18	34	28	37	53
9. I like playground.	ч	0	14	22	43	45	143	33
10. Grown-ups talk with me.	N	0	61	65	56	31	Ħ	10
11. I get along better at school than home.	50	53	44	γ <sub>1</sub> 3	4	0	3	<b>t</b>
12. I get along well with other kids.	3	0	36	18	04	23	55	2 <u>6</u>
13. I understand my school work.	н	0	23	45	34	53	12	Ŋ
l4. I like to play sports.	4	0	12	14	30	45	54	63
15. I like to sing.	50	12	37	51	25	59	18	ω



TABLE VIII (cont.)

ITEM	M N = September N = June	. 86 Ω	NEVER	S № S	Sometimes % % S	₽~ W	LOT %	AILA S	AIWAYS
16.	I like to dance.	58	57	28	35	7	9	7	2
17.	I like to cook.	18	10	31	59	25	31	27	59
18.	I am allowed to cook.	16	9	54	64	18	29	21	91
19.	I eat breakfast.	4	0	20	18	7	18	99	<del>1</del> 9
20.	I eat most of my lunch.	77	Ŋ	27	56	31	39	37	33
21.	I play with other children at recess.	8	0	22	22	36	27	04	141
22.	I like to do jobs for the teachers.	9	હ	56	56	33	L <sup>†</sup> t	34	56
23.	I think grown-ups are trying to help me.	8	O	29	50	141	<b>L</b> †1	27	33
24.	I would like to have more than one grown-up in my room.	7	N	28	56	22	56	143	24
25.	I worry in school.	32	30	17	99	11	a	7	Ø
26.	Saturday and Sunday are my favorite days.	7	†	33	33	17	22	24	14
27.	My stomach feels funny in school.	742	57	61	<sub>4</sub> 3	7	0	α <sub>.</sub>	0
28.	I feel like crying in school.	63	09	33	34	77	9	0	0
29.	I am afraid in school.	<b>L</b> 9	68	30	28	3	2	н	N
30.	I bite my fingernails in school.	54	53	27	35	6	9	10	9
31.	I wish I had more help with my work.	6	18	77	98	7	0	7	Ω.



# TABLE VIII(cont.)

ITEM	H H N N	September June	NE NE	never J	SOME S	SOMETIMES S A A	S A LOT	O. 20 A.C.	ALWAYS	۲3 عر م	
32		I wish someone would listen to me.	13	20	.65	55	10	20	יו	9	
33.	In school i daydresm.	ydream.	33	14	15	64	6	10	7	0	
34.	I am afraid of grown-ups.	grown-ups.	57	75	38	56	<b>-</b> †	0	a	0	
35.	I am afraid of children.	children.	#8	96	91	10	т	0	0	0	
36.	I am afraid of women.	women.	. 69	96	35	10	0	0	3	0	
37.	I am afraid of men.	men.	51	73	04	28	5	0	#	0	•
38.		I am afraid to go to the store.	88	88	13	10	ч	0	0	8	
39.	I oversleep in the morning.	the morning.	34	39	50	143	11	10	2	80	
<b>,</b> 04		I get confused by having more than one grown-up in my room.	89	82	28	18	m	0	α α	0	



# Sixth Graders (See Table IX)

Sixth graders were very positive, in general, in their outlook toward school. Ninety-three percent reported liking school to some degree in September as compared to 96% in June. Students were most positive toward playground. There was little change during the year in how they viewed math. They were slightly more negative toward reading and art and showed considerably less positive attitude toward social studies. The percentage "never" liking social studies increased from five percent in September to twenty-five percent in June.

The sixth graders reported that they were not confused by having more than one adult in the classroom. Sixty-four percent said "never" in September while seventy-two said the same in June.

# Remedial Group (See Table X)

Since there is such a small number of students in the remedial group, the change in percentages should be viewed with caution. They tended to be positive toward school but less so than the regular students. They became more positive toward reading and social studies but less toward science, math and art. They tended to prefer more than one grown-up in their room and reported they would not be confused.

# Total Sample (See Table XI)

Seven items related to attitudes toward teachers and trainees. In general the attitude of students toward this group was very positive both in September and June. Approximately 90% of the students stated they would like to have more than one grown-ups in their room to some extent.

Eight items related to students' attitude toward school and school subjects. The students responding to the scale were very positive concerning school. Over 90% of the sample reported they liked school to a certain extent. There were no major shifts of attitudes toward separate subjects. It should be noted that the attitudes were very positive.



TABLE IX

Comparison of Sixth Graders September and June Responses on School Attitude Scale

II		NEVER	H.	SOMET	IMES	٧		ALMA	YS
ĺ	$N = 92$ September $N = 9^{\mu}$ June	es ⇔	ور <i>ع</i> م	8 S J	8 D	er 0	P6 12	\$€ Ω \$€ ₽	£5. t⊃
٦,	I like school.	7	77	58	99	†7Z	72	टा	3
δ,	Grown-ups pay attention to me in school.	9	ч	99	17	56	20	N	8
က်	My teachers understand me.	m	٣	61	09	37	30	п	9
<b>.</b> 1	I like reading.	m	7	38	39	35	35	77	18
	I like science.	15	9	01	34	.29	36	15	23
•	I like math.	14	17	39	L <sup>†</sup> 1	33	25	<b>†</b> 7	77
7.	I like social studies.	7	30	36	36	37	25	22	70
8	I like art.	11	. 91	28	7,2	25	22	36	50
9,	I like playground.	ณ	3	น	23	33	23	54	52
10.	Grown-ups talk with me.	<b>†</b>	ſΛ	19	26	27	35	ω	ε
: וי	I get along better at school than home.	<b>L</b> †1	26	45	36	9	5	Ŋ	2
12.	I get along well with other kids.	-	0	59	27	<b>1</b> 4	51	53	22
13.	I understand my school work.	0	ю	Lħ	45	<b>†</b> †	51	6	ч
14.	I like to play sports.	ю	٣	15	15	19	16	63	99
15.	I like to sing.	24	18	35	<del>1</del> 1	19	30	23	6



TABLE IX (cont.)

ITEM N = September N = June	. & W	NEVER	గు ఉందు భ	SOMETIMES	&Ω A	LOT	S & SI	ALWAYS % J
16. I like to dance.	Ţħ	31	#:	37	15	20	97	21
17. I like to, cook.	6	5	30	12	30	30	32	38
18. I am allowed to cook.	17	īV	94	54	23	30	<b>†</b> F	18
19. I eat breakfast.	4	7	97	15	18	18	. 63	09
20. I eat most of my lunch.	†	4	28	29	32	77	36	24
21. I play with other children at recess.	ч	н	19	17	29	35	52	50
22. I like to do jobs for the teachers.	α	7	23	36	25	31	55	56
23. I think grown-ups are trying to help me.	н	्न	39	04	59	33	30	56
24. I would like to have more than one grown-up in my room.	æ	17	54	38	15	20	23	25
25. I worry in school.	22	56	53	62	14	6	11	<b>4</b>
26. Saturday and Sunday are my favorite days.	10	N	29	37	17	23	45	37
27. My stomach feels funny in school.	33	<del>1</del> 717	09	50	4	4	νį	Q
28. I feel like crying in school.	77	73	56	25	8	ч	ч	ч
29. I am afraid in school.	73	<b>8</b> 9	54	28	Ŋ	(1	ч	8
30. I bite my fingernails in school.	141	51	04	35	1	77	12	ന
31. I wish I had more help with my work.	11	9	77	75	10	77	6	6



TABLE IX (cont.)

ITEM	N N	September June	NEV S S	NEVER J	SOME S	SOMETIMES S J	A S &	LOT Log	Always S %	KS Pars
32	I wish someone wo	I wish someone would listen to me.	15	-	53	17	17	41	10	8
33.	In school i daydresm.	eem.	27	54	55	50	10	16	80	10
34.	I am afraid of grown-ups.	• sdn-uno.	58	62	36	34	1	н	0	m
35.	I am afraid of children.	nildren.	75	11	23	55	0	п	Q	0
36.	I am afraid of women.	omen.	19	80	30	50	ત્ય	0	0	0
37.	I am afraid of men.	•n•	55	64	775	45	Q	3	0	m
38.	I am afraid to go to the store.	o to the store.	87	86	13	10	0	0	0	٦
39.	I oversleep in the morning.	he morning.	70	32	84	<del>2</del> 4	2	4	7	10
<b>*</b> 0*	I get confused by hagrown-up in my room.	I get confused by having more than one grown-up in my room.	<del>1</del> 9	72	53	23	m	H	m	4

Comparison of RemedialGraders September and June Responses on School Attitude Scale

ITEM N = 13 September N = 11 June	NEVER	ER % J	S OMET	SOMETIMES	& & A L	LOT % J	Always % S	rs g
1. I like school.	8	18	15	36	15	6	62	36
2. Grown-ups pay attention to me in school.	ω	0	15	6	15	55	62	36
3. My teachers understand me.	0	0	39	18	23	36	39	94
h. I like reading.	23	6	15	18	23	36	39	36
5, I like science.	80	36	15	0/	31	36	<b>9</b>	18
6. I like math.	0	18	39	18	23	94	39	18
7. I like social studies.	31	0	23	0	0	09	94	40
8. Illke art.	ω	18	23	18	31	36	39	. 12
9. I like playground.	80	0	89	18	15	36	69	91
10. Grown-ups talk with me.	0	0	39	917	15	27	91	12
11. I get along better at school than home.	23	6	23	36	23	18	31	36
12. I get along well with other kids.	0	0	31	94	39	36	31	18
13. I understand my school work.	15	0	15	917	31	27	39	18
14. I like to play sports.	15	18	8	18	15	94	62	18
15. I like to sing.	23	36	39	27	23	18	15	18



TABLE X (cont.)

ITEM N = September N = June	<i>≥ ₽</i> 6 Ω	NEVER	బిశాబ ర్ల	SOMETIMES % % S J	<i>₽</i> £ 03	A LOT	<i>8</i> ∞ 3	ALWAYS
16. I like to dance.	47	93	15	27	15	27	15	0
17. I like to, cook.	0	0	80	0	23	<del>1</del> 9	69	36
18. I am allowed to cook.	31	27	37	18	ω	27	31	22
19. I eat breakfast.	0	0	39	04	15	30	97	30
20. I eat most of my lunch.	0	6	62	18	23	18	15	55
21. I play with other children at recess.	0	0	53	0	23	20	<del>1</del> 5	20
22. I like to do jobs for the teachers.	ω	0	15	18	15	36	62	<b>1</b>
23. I think grown-ups are trying to help me.	0,	0	80	27	31	36	62	36
24. I would like to have more than one grown-up in my room.	15	0	15	18	끖	36	39	3
25. I worry in school.	917	94	917	9	0	18	တ	27
26. Saturday and Sunday are my favorite days.	ω	27	39	6	15	18	39	3
27. My stomach feels funny in school.	91	73	39	27	15	0	0	0
28. I feel like crying in school.	54	<del>1</del> 9	31	36	15	0	0	0
29. I am afraid in school.	69	82	23	18	0	0	ω	0
30. I bite my fingernails in school.	15	55	62	36	0	σ	23	0
31. I wish I had more help with my work.	15	0	39	36	15	94	31	18



TABLE X (cont.)

TTEM		~ w	NEVER J	SOM S	SOMETIMES S	ω.	A LOT	ALI	ALWAYS
	N = June	8	RE	PE	<i>5</i> 6	P.C.	P65	PE	<i>ب</i> ع.
32.	I wish someone would listen to me.	23	0	31	55	23	12	23	18
33.	In school I daydream.	45	24	23	27	80	18	15	6/
34.	I am afraid of grown-ups.	62	82	31	18	ω	0	0	0
35.	I am afraid of children.	77	<del>1</del> 9	15	36	0	0	ω	C
36.	I am afraid of women.	92	100	0	0	0	0	80	0
37.	I am afraid of men.	31	<del>1</del> 9	94	18	0	6	23	6
38.	I am afraid to go to the store.	69	79	23	18	ω	6	0	0,
39.	I oversleep in the morning.	15	18	54	55	80	18	23	6
40.	I get confused by having more than one grown-up in my room.	69	73	53	18	80	0	0	6



TABLE XI

Comparison of Total Sample's September and June Responses on the School Attitude Scale

	= 581 September Attitudes toward Teachers/Trainees	ers/Train	nees	S C C	Comp+1mec		10+ 10+	Alveve	   80   80
1	= 7+4 aure	w 46		ω .es	20.00	SP CO	} 10 €	S de	200
๙	Grown ups pay attention to me in school.	7	4	54	54	23	25	19	17
က်	My teachers understand me.	m	Ø	143	45	28	28	56	25
10.	Grown ups taik with me.	7	5	24	53	92	27	13	15
22.	I like to do jobs for the teachers.	īV	4	19	56	54	56	53	43
23.	I think grown ups are trying to help me.	4	ო	56	56	30	<b>56</b> .	04	77
24.	I would like to have more than one grown up in my room.	ជ	6	36	30	15	17	39	<b>∄</b>
40.	I get confused by having more than one grown up in room.	<b>11</b> 29	63	32	31	4	ત્ય	7	ო
	Attitude toward School/Subjects	o <b>1/</b> Sub jec	ts						
į.	I like school.	9	ω	L† <sub>1</sub>	50	25	23	22	19
4	I like reading.	1	8	27	೫	35	31	30	30
5.	I like science.	75	70	28	31	30	29	31.	30
ý	I like math.	†T	15	31	35	25	<b>5</b> †	30	56
7.	I like social studies.	11	376	36	37	28	25	25	25
ဏ်	I like art.	2	5	17	20	30	2lt	64	51



TABLE XI (cont.)

Attitude toward School/Subjects	Sub ject	8						
		₩77 N T N T N T N T N T N T N T N T N T N	υ & Σ	CHWITTHWON	т Ч ъе	707. A 20.	A. 4.	ALMAIS 6 %
	. w	۵,	. ഗ	. ט	. w	۵.	. က	ط.
9. I like playground.	2	-	13	18	30	23	55	58
11. I like school better than home.	742	<b>‡</b>	742	39	7		6	10
Attitude toward Self/Self progress	progre	88						
13. I understand my school work.	Q	N	20	64	28	35	20	13
25. I worry in school.	37	36	94	53	6	7	6	5
29. I am afraid in school.	73	91	2h	25	2	н	-	8

### Objective Three

At the end of one project year, 90% of the teacher trainees spending a full college year in L.E.A. classrooms will be able to identify, according to L.E.A. University developed criteria, 50% more of the practical application of non gradedness, team teaching, individualization, instructional television, the Integrated Day, differentiated staffing, learning disabilities programs, environmental education and basic methods of teaching reading, mathematics, science, social studies, penmanship, language arts, music, art and physical education than they were able to in September of the project year, as established from baseline data. Ninety percent of the teacher trainees placed in 4,5, and 6 grade classrooms, in addition to the above, will be able to identify and describe salient parts of Bruner's Man: A Course of Study social studies program and a drug abuse education program.

A criterion test (See Appendix B) was administered to the trainees both in September and May. Each objective will be presented singularly and then the appropriate data given.

1. Describe 2 specific ways in which a teacher uses non gradedness in a classroom:

Pre Test: 16 out of 22 could <u>not</u> give one way
6 out of 22 could give one way
0 out of 22 could give two ways

Post test: 8 out of 24 could list two ways 16 out of 24 could list one way

2. Describe 3 specific ways in which a teacher participates in team teaching practices.

Pre test: 6 out of 22 could not list one way
13 out of 22 could list one way
2 out of 22 could list two ways
1 out of 22 could list three ways

Post test: 3 out of 24 could list 2 ways 21 out of 24 could list 3 ways

3. Describe 3 specific means of individualizing the learning program for a child:



Pre test: 7 out of 22 could not list one way

12 out of 22 could list one way
3 out of 22 could list two ways

Post test: 2 out of 22 could list 2 ways 20 out of 22 could list 3 ways

4. Give 3 values and practical applications of TV in the classroom.

Pre test: 6 out of 22 could <u>not</u> list one way
15 out of 22 could <u>list</u> one way
1 out of 22 could <u>list</u> 2 ways

Post test: 1 out of 24 could list 1 way
14 out of 24 could list 2 ways
9 out of 24 could list 3 ways

5. Integrated Day: Describe the pupil's role, teacher's role and the presentation of subject/skill matter.

Pre test: 18 out of 22 could not list one role
3 out of 22 could list one role
1 out of 22 could list two roles
0 out of 22 could list three roles

Post Test: 24 out of 24 could list three roles

6. List a typical hierarchy of differential staffing:

Pre test: 17 out of 22 could not give any hierarchy
4 out of 22 could list partial hierarchy
1 out of 22 could list a complete hierarchy

Post test: 3 out of 24 could list partial hierarchy 21 out of 24 could list a complete hierarchy

7. List 5 common learning disabilities and a very brief prescription for each.

Pre test: ll out of 22 could list no disabilities
10 out of 22 could list one disability
1 out of 22 could list two disabilities

Post test: 2 out of 24 could list no disabilities

1 out of 24 could list two disabilities

3 out of 24 could list 4 disabilities

18 out of 24 could list five disabilities



8. List 3 ways in which an environmental education program is correlated into a classroom program.

Pre test: 11 out of 22 could not list one way
10 out of 22 could list one way
1 out of 22 could list two ways

Post test: 18 out of 24 could list two ways 6 out of 24 could list three ways

9. Describe the purpose of the following units in Burmer's Man: A Course of Study - Gulls, Salmon, Baboons, Eskimos

Pre test: 23 out of 24 could not list one purpose 1 out of 24 could list one purpose

Post test: 24 out of 24 could list four purposes

10. List 6 sequential concepts presented in a drug abuse program for elementary school pupils.

Pre test: 20 out of 22 could not list one concept
l out of 22 could list one concept
l out of 22 could list two concepts

Post test: 1 out of 24 could not list one concept
2 out of 24 could list two concepts
3 out of 24 could list five concepts
18 out of 24 could list six concepts

ll. Five specific reading skills taught in elementary schools and practical applications of teaching them are:

Pre test: 15 out of 22 could not list one combination
4 out of 22 could list one combination
2 out of 22 could list two combinations
1 out of 22 could list three combinations

Post test: 1 out of 24 could not list one combination 2 out of 24 could list two combinations 6 out of 24 could list three combinations 14 out of 24 could list four combinations 1 out of 24 could list five combinations



12. Three practical means of teaching arithmetic computations are; of arithmetic concepts are; of arithmetic applications are:

Pre test: 13 out of 22 could not give one way
3 out of 22 could give one way
2 out of 22 could give two ways
4 out of 22 could give three ways

Post test: 4 out of 24 could give six ways
10 out of 24 could give seven ways
5 out of 24 could give eight ways
5 out of 24 could give nine ways

13. Three means of teaching science and involving pupils directly are:

Pre test: 9 out of 22 could not give one way
9 out of 22 could give one way
4 out of 22 could give two ways

Post test: 2 out of 24 could give one way
21 out of 24 could give two ways
1 out of 24 could give three ways

14. Three practical applications of social studies are:

Pre test: 16 out of 22 could not give one way 6 out of 22 could give one way

Post test: 1 out of 24 could give one way
13 out of 24 could give two ways
10 out of 24 could give three ways

15. Give three practical ways of teaching penmanship:

Pre test: 16 out of 22 could not give one way
5 out of 22 could give one way
1 out of 22 could give two ways

Post test: 3 out of 24 could give one way
11 out of 24 could give two ways
10 out of 24 could give three ways

16. Give four ways of correlating language arts with other subjects: identify the subjects.

Pre test: 16 out of 22 could not give one way
5 out of 22 could give one way
1 out of 22 could give two ways



Post test: 1 out of 24 could not give one way
8 out of 24 could give two ways
9 out of 24 could give three ways
6 out of 24 could give four ways

17. Five ways of presenting music to elementary pupils are:

Pre test: 6 out of 22 could not give one way
5 out of 22 could give one way
3 out of 22 could give two ways
7 out of 22 could give three ways
1 out of 22 could give four ways

Post test: 6 out of 24 could give three ways
16 out of 24 could give four ways
2 out of 24 could give five ways

18. Give five practical art lessons.

Pre test: 14 out of 22 could give no lessons
3 out of 22 could give two lessons
2 out of 22 could give three lessons
3 out of 22 could give four lessons

Post test: 1 out of 24 could give two lessons
4 out of 24 could give three lessons
18 out of 24 could give four lessons
1 out of 24 could give five lessons

19. Five practical methods of accomplishing the purposes of an elementary school physical education program are:

Pre test: 17 out of 22 could not list one method
3 out of 22 could list one method
1 out of 22 could list two methods

Post test: 4 out of 24 could list two methods
15 out of 24 could list three methods
4 out of 24 could list four methods
1 out of 24 could list five methods



Paired "t" test were computed between the pre and post test score means for each item as well as the total score. All differences were significant at or beyond the .001 level. The results are found in Table XII.

TABLE XII

Comparison of Pre and Post test Mean Scores on the Criterion Test

Item	Pre M	SD	Post M	SD	"t," ***
1	•25	.44	1.25	.44	6.164
	• 95	•76	2.90	.31	10,563
3	.82	.60	2.95	•32	11.211
2 3 4	.29	.49	2.30	•57	8.542
	.20	.52	3.00	•00	
6	•35	•75	2.85		23.936
7	.45	.60	4.30	•37 1 <b>.6</b> 4	12.583
5 6 7 8	.60	.60	2.25	.44	9.980
9	.05	.22	3.95	.22	9 <b>.</b> 079
10	.15	•49	5 <b>.</b> 20		56.665
11	.50	.88	3.50	1.74	12.609
12	0.65	1.03		1.05	10.029
13	.90	.91	7.50 2.00	1.00	31.003
14	•35	•91 •49		.32	5.082
15	•35	• 59	2.29 2.20	•57	14.419
16	1.65	1.35		•70	8.373
17	1.09	1.62	3 <b>.7</b> 9	•52	6.143
18	.30	.65	3 <b>.7</b> 9	<b>.</b> 62	6.674
19	.32		3.00	•73	11.171
Cotal	10.80	. <b>1</b> 0 6.02	3.09	.81	16.198
(paired		0.02	61.95	6.92	29.550
Total Sa	ample (unpair	ed Pre 22 post	, 24)		
	10.68	5 <b>.7</b> 6	62.21	6.52	28,296

\*\*\* significant at .001 level



# Objective Four

By the end of one project year, 75% of the teacher trainees spending a full college year in the L. E. A. classrooms will have successfully implemented, by L. E. A. - University developed criteria, 75% of the following classroom practices: non gradedness, team teaching, individualization, use of instructional television, Integrated Day teaching, learning disabilities program, environmental education, and basic methods of teaching reading, mathematics, science, social studies, penmanship, language arts, music, art and physical education.

The process of evaluating this objective was through interviews with the project staff, teachers, University participants and students. A few observations were made of interns teaching but no systematic plan of external observation was used.

All students were assigned passing grades for their experiences indicating positive evaluation on the part of UMPG personnel of the student progress in the program. The individual transcripts and records for each student have been kept on file by the project director. The teachers of S.A.D. 71 having interns were also involved in the evaluation process.

A couple of students were warned about their attitude and performance but completed the year.

From a theme or content the interviews with the teachers indicated that the teachers felt that students needed more work in methods of teaching reading, especially before the students were assigned to the program. Most of the students interviewed planned to take additional courses in reading. Secondly, there was need seen for more knowledge of learning disabilities. Again this was an area in which most students wanted additional preparation.

Students also perceived need for courses in the new approaches to teaching physical education in the elementary school, relating to psychomotor and perceptual motor types of programs.



# Objective Five

At the end of one project year, the 25 teacher trainees spending a full college year in L.E.A. classrooms will score, at the 1, 2, and 3 quartiles, a higher score than will a randomly selected group of 25 college students of the same college year and college, who are not engaged in the project, in a commercial test that will test attitudes and skills for teaching.

Revised objective: There will be no significant differences between the mean scores on the Minnesota Teacher Attitude Scale of the trainees and a randomly selected group of elementary education students.

The Minnesota Teacher Attitude Inventory was administered to the intern group at the end of the school year in May, 1973. The mean score of the group was 59.20. Compared to the norming group of graduating seniors in elementary education, the group mean would be equivalent to the 25 percentile. The distribution of raw scores on the MTAI for the group is presented in Table XIII. The scores ranged from 8 to 101. The median score was 54.5. The standard deviation was 26.77. A "z" test comparing the interns with the standardization group of elementary education seniors majors was computed. A "z" of 3.12 was found to be significant at the .01 level. (See Table XIV) The interns had a significantly lower mean than the standardization group.



TABLE XIII

Distribution of Raw Scores on the Minnesota Teacher Attitude Inventory for the 1972-73 Portland-Gorham Interns in Kennebunk

Score Range	Frequency	
100 - 109	2	
90 - 99	3	
80 - 89	i	$\overline{X} = 59.20$
70 - 79	3	
60 - 69	ī	Q2=54.50
50 <b>-</b> 59	4	_ ,
40 - 49	14	SD=26.77
30 - 39	3	
20 - 29	2	
10 - 19	0	
0 - 9	1	
N	24	

"z" test comparing Interns with Standardization group of Elementary Education Seniors

Group	N	$\overline{\mathbf{x}}$	SD	"z"
Interns	24	59 <b>.</b> 20	26.77	3.12**
Standardization	150	77 <b>.</b> 40	24.70	



# Objective Six

By the end of one project year, the teachers of the L.E.A. participating in the project will, through a L.E.A.--University developed survey instrument, be able to contrast the project year with baseline data established in September of the project year and 70% of the teachers will find the project year more rewarding, stimulating, and conducive to self-growth than previous years.

A sixteen item survey form was given to the project teachers in September and in June. The responses by the teachers is given in Table XV. They responded to each item on a five point scale ranging from "always" to "never."



N = 31 N = 17

TABLE XV

Comparison of Pre and Post Responses In Percentages on the Teacher Survey Form	June	September
	Comparison of Pre and Post Responses	In Percentages on the Teacher Survey Form

Item	Never	Seldom	Occasionally	Usually	Always	
<ol> <li>How often are you able to provide the individual help each child in your class needs?</li> </ol>		5.55	66.66	27.77 87.09	6.67	s .
<ol> <li>How often have you been able to have conferences with the specialists in learning disabilities speech, reading, etc.?</li> </ol>		55,55	44.44	51.61	19.35	SJ
3. How often have you been able to effectively follow up in the work done by these specialists?		50.00	33.33 25.80	16.66 61.29	12.90	S
4. How often do you go home feeling you have not accomplished your goals for the day?		11.11	50.00 16.12	38.88 54.83	29.03	S
5. How often do you have time to "listen" to your students?		16.66	27.77	44:44 74.19	11.11 22.58	S D
6. How often have you been unable to immediately contact a parent, the principal or another teacher about a problem because you couldn't leave the class for the 10 or 15 minutes such contact takes?	22.22	16.66 36.66	27.77 20.00	27.77	5.55	S
7. How often do you go home excited about what happened in your classroom?	3,33	5.88	58.82 16.66	29.41 76.66	5.88	S L
8. How often do you go home feeling you profited from some teaching you saw someone else do?	23.52	70.58	5.88	38.70		S D
9. How often have you been free to visit an- other teacher's class?	38.88	50.00 19.35	11.11 54.83	22.58	3.22	S D
10. How often are supplementary teaching materials used in your classroom?			29.41	69 70 64.51	5.88	s r



Item	Never	Seldom	Occasionally	Usually	Always	
11. How often have you been able to give diagnostic attention to the individual child		75 20	α α	ر « «		ر.
and the specific activity in which he is involved before changing, extending or redirecting his activity?		3,22	25.80	54.82	16.12	ט נ
12. How often have you been able to regroup students along interest lines?	5.55	11.11	72.22 25.80	11.11 54.83	16.12	S L
13. How often have you been able to take one group of students out of the room for an activity while, at the same time, knowing the rest had proper instruction and supervision?	41.17	47.05	11.76 3.22	64.51	25.80	S L
14. How often do you feel individual students' non-academic problems have been given adequate attention?	5.88	23.52	47.05 6.45	23.52 61.29	22.58	S
15. How often do you feel the children have been in a positive learning situation without you being the center of attention?	5.88	17.64	70.58 25.80	5.88	3.22	SL
16. How often were you able to have several constructive activities going on in your room simultaneously?		11.76	52.94 16.12	35.29 74.19	9.67	SJ



There was a shift of response patterns from pre to post-test on item 1:

How often are you able to provide the individual help each child in your class needs. Two-thirds of the teachers responded "occasionally" in September to only 3% in June. Eighty-seven percent reported "usually" in June to only twenty-eight percent in September. Approximately 10% reported "always" in June to zero percent in September.

The same trend also appeared to "how often have you been able to have conferences with specialists in learning disabilities, speech. Seventy percent of the teachers reported "usually or always" in June whereas none of the teachers did so in exptember.

Approximately the same distribution was also true of "effectively following-up the work done by learning disabilities, speech, reading, etc. Approximately seventy-five percent reported they "usually" or "always" did in June to only 17% in September.

Teachers tended to be less satisfied with their accomplishment of goals though. Eighty-four percent reported that they "usually" and "always" felt so in June as compared to about 40% in September.

About 95% of the teachers stated that they "usually or always" had time to 'listen' to their students in June as compared to about 40% in September.

The response pattern in September and June was similar to the item about being unable to immediately contact the parent, principal or another teacher about a problem because they could not leave the classroom. About a third stated "usually or always" in September to about one fourth in June.

Slightly over three-fourths of the teachers in June stated that they "usually" or "always" were able to go home feeling they profited from some teaching they saw someone else do as compared to about one-third of the teachers in September.

About 95% of the teachers reported that they were "seldom" or "never" excited about what happened in their classroom as compared to only 6% at the end of the year.



Ninety-three percent in June reported that they were "occasionally" or "usually" excited.

Approximately 90% of the teachers in September checked that they were "never" or "seldom" able to visit another teacher's class to about 20% in June. About thirty percent of the teachers at the beginning of the year said that they were only "occasionally" using supplementary teaching materials to zero percent at the end of the year. About 65% both in September and June checked they were "usually" using these materials. Thirty-five percent reported in June they were "always" making use of these materials to only six percent in September.

Seventy percent of the teachers at the end of the year reported that they "usually" or "always" were able to give diagnostic attention to only six percent at the beginning of the year.

The same pattern held true with regrouping students along interest lines.

(71% "usually" or "always" in June to 11% in September.)

At the end of the year, ninety percent of the teachers reported that they were able to take one group of students out of the room for an activity while, at the same time, knowing the rest had proper instruction and supervision.

None of the teachers checked these two categories in September. Forty-one percent of the teachers even stated "never" at the beginning of the year.

About three-fourths of the teachers were able to report in June that they felt "usually" or "always" that the individual students' non-academic problems were given adequate attention to only twenty-four percent in September. About thirty percent checked "never" or "seldom" at the beginning of the year to only ten percent "seldom" at the end of the year.



At the end of the school year three-quarters of the teachers said they felt "usually" or "always" that the children were in a positive learning situation without the teacher being the center of attention to only six percent at the beginning of the year. Seventy-one percent reported "occasionally" in September to only 26% in June. Twenty-three percent reported "never" or "seldom" in September to zero percent in June.

Eighty-four percent of the teachers stated in June that they "usually" or "always" were able to have several constructive activities going on in their classrooms simultaneously to about 35% in September. Fifty-three percent checked "occasionally" at the beginning of the year to only 16% at the end of the year.



### Ratings of Courses Taken By Interns

The ratings of courses taken by the interns is presented in Table XVI. A forty-five item questionnaire was completed by 21 of the students. They were asked to react to each course as to how helpful these courses were in preparing them for teaching. The courses were rated on a five point scale ranging from no value to having tremendous value.

They found their student teaching and/or junior year internship the most valuable experience. All gave these experiences a "5" rating or "having tremendous value" in preparing them for teaching.

The Teaching of Reading received the next highest mean rating 4.65 followed by the Teaching of Math (4.24), Elementary School Curriculum (4.05), and Teaching of Science (4.04).

Three liberal arts courses were rated in the three "of great value" range. These courses were mathematics (3.55), introduction to Psychology (3.11) and introduction to literature (3.06).

Courses which received 15 or more ratings are only included in this description.

Physical Science (2.95), Human Growth and Development (2.81), Composition (2.80), Physical Education (2.72), Music (2.62), Measurement and Evaluation (2.53), the American School (2.50), Art (2.33), Biological Science (2.13) and Western Civilization (2.07) follow in the little value category.



TABLE XVI

Rating of Courses taken by Interns as to how helpful These courses were in preparing them for Teaching

Course	#Completing Course	No Value 1	Little Value 2	Some Value 3	Great Value 4	Tremendous Value 5	Mean	Mode
Compositon	20	н	#	13	N	0	2.80	ĸ
Introduction to Literature	18	н	m	12	ო	0	3.06	m
Topics in Literature		਼ੁਜ	٣	80	0	0	2,58	<b>m</b>
Modern Language	4	0	0	Ø	ч	ч	3.75	က
Philosophy	7	8	0	N	N	0	2.86	т
Art	15	†	2	٣	٣	0	2.33	Ø
Music	16	ч	4	7	<b>4</b>	0	2,62	8
Theater	, ,	0	0	0	ч	0	7.00	1
Speech	80	н	0	4	Q	ч	3.25	8
Physical Science	;e 20	0	4	11	<i>4</i>	0	2.95	3
Biological Science 16	nce 16	2	9	٣	α	0	2.13	
Mathematics	20	N	0	9	6	٣	3.55	ব
Introducation to Psychology	18	m	a	9	4	m	3.11	٣
Child Psychology	, L	0	a	٣	0	ČV.	3.28	8



TABLE XVI (cont.)

Course	#Completing Course	No Value	Little Value	Some Value	Great Value	Tremendous Value	Mean	Mode
Adolescent								
Psychology	က	0	α	ч	0	0	2.33	Q
Educational Psychology	. н	0	7	0	0	0	1.00	н
Political Science	t = 01	N	0	ч	н	0	2.25	н
Sociology	14	α	m	2	Ą <b>t</b>	0	2.78	3
Economics	<u>S</u>	m	٦	н	0	0	1.60	ı
American School	. 20	m	7	æ	н	<b>н</b>	2.50	٤
Philosophy of Education	6	က	ч	4	н	0	2.33	m
History of Education	ന	СI	0	ת	0	0	1.67	ч
Curriculum	21	0	α	4	9	6	4.05	5
Teaching of Reading	50	0	0	Q	m	15	4.65	5
Teaching of Mathematics	23	0	0	rV	9	10	ग्ट• ग	
Peaching of Science/Health	h 21	0	ત્ય	m	æ	8	<sup>†</sup> 0°	5,4
Children's Lit.	21	2	ч	77	7	10	3.91	5
Feaching of Art	9	ч	ᡕ	0	Ŋ	c <sub>J</sub>	3.50	4,5
Seaching of Music	1c 6	m1	C	r4	Q	CV	3.67	5,4

TABLE XVI (cont.)

Course #C	#Completing	No	Little	Some	Great	Tremendous	Mean	Mode
	course	verue 1	Value 2	Value 3	Value 4	Value 5		
Teaching of Physical Educ.	0	,o	0	0	0	0		
Teaching Process	ч	0	0	0	0	н	5.00	ŗ.
Measurement and Evaluation	21	4	7	. <b>v</b>	m	Ħ	2.53	. <b>.</b>
Human Growth and Development	21	ო	Ĺ	۲	0	н	2.81	, Q
Physical Educ.	18	4	†	7	m	Q	2.72	m
Pre Professional Experience	10	0	0	ਜ	н	<b>&amp;</b>	70 ئ	, rv
Student Teaching	17	0	0	0		17	2.00	, <u>r</u>
Junior Year Intern.19	1.19	0	0	0	0	19	5.00	. <u>.</u> .
Independent Study	7	0	0	٥	a	5	4.71	5
Audio-Visual Aids	· •	0	0	N	н	m	4.17	ı,
West. Civilization 15	1 15	<b>4</b>	δ	0	н	ч	2.07	ณ
American History	12	- 0	CŲ	7	a	1	3.17	M
Their Acad. Field	14	0	1	κ	က	7	4.13	, r
Diagnostic and Remedial Reading	<b>!</b> -	0	0	н	н	ī,	14.57	2
Learning Dis- abilities	Qi	¢	0	۲.	0	ч	00• 1	3,5

#### SUMMARY

In this ection each objective will be reviewed and the major findings summarized. The first objective related to student achievement in classrooms having interns. With the fourth grade, gain in achievement was independent of type of classroom. The median gain in three of the four quartiles was higher for project students than non project students but not significantly so. With fifth grade, achievement was dependent on type of classroom for the second and third quartiles but not the top or bottom. A greater percentage of students in project classrooms in the middle quartiles made achievement gains of a year or more. Achievement testing begins in the third grade so no comparisons could be made with previous achievement. The mean achievement scores were significantly higher for one of the project classrooms in Language, Arithmetic Computation, Arithmetic Concepts and the Battery Median. These results may be due to a number of other factors than the presence of an intern in the classroom. It is interesting to note, however, that the range of achievement was greater in all cases with third grade project teachers and the median achievement was higher for project classrooms than non project classrooms on all but one of the subtests. No major achievement differences were found for the sixth grade group.

The second objective related to "student attitude". The students, in general, were very positive toward school and school subjects. There were no major shifts of attitudes from September to June. There was a greater spread of attitude toward school subjects, though, the higher the grade.

The presence of an intern or another adult in the classroom was viewed as beneficial and not confusing by the overwhelming majority of students. The response by grade was usually slightly more positive in June than in September.



The third objective concerned "knowledge of teaching practices."

The preter ing revealed that the interns had very limited knowledge of teaching practices prior to their experiences during the year. A few of the students had limited knowledge from certain courses prior to the internship. In May, almost all the group demonstrated mastery of all the criteria set for them by the project staff. In general the weakest areas for the group were in the areas of reading, physical education and learning disabilities.

The fourth objective was parallel to the third but focused on "application of teaching practices." Interviews with the cooperating teachers, project staff and students were held. The formal records such as grades for the year, and informal such as observations by the staff and teachers would indicate mastery of the criteria set for the students at this point in time.

The fifth objective related to "attitudes of the interns." The MTAT was administered to the interns in May. A control group was contacted but their scores were not available at the time of the writing of the final report. The scores of the intern group, therefore, were compared to the norming sample. The attitudes of the interns were significantly less positive than those of the standardization group of elementary education majors. The research on student teacher attitudes indicates, however, that attitude of students tends to drop after the student teaching experience. One explanation of this change is that students prior to the experience idealize teaching and after the experience become more realistic about teaching.

There was quite a shift in attitudes from September to June on the part of cooperating teachers. More teachers felt they could provide more individualized help for students, have more conferences with specialists and listen to their students in June than they could in September. The same change was evident in how they replied to other teaching practices such as grouping

and scheduling. They also felt freer to visit other teacher's classes. More teachers in June reported, however, that they were not accomplishing the goals set for the day. Two types of explanations might explain this finding. One, the wording of the item was negative and teachers might have overlooked the word "not." Secondly, with increased help and time, the teachers may set more goals for themselves and their students. Their awareness and expectations might be expanded from the influence of the project and interns.

Reviewing the ratings given by the students involved in the program indicate that they felt that the on-site experience for the whole year was very beneficial preparation for them for teaching and that the courses taken by them on-site and during the experience were much more valuable to them than those taken previously. The ratings given the methods courses were much higher than found in previous research by one of the evaluators. One explanation for this is that the students had a chance to apply what they had learned immediately.



#### RECOMMENDATIONS

After reviewing the objectives set for the first year of the program, the documentation of results, the evaluation design, the on-site report, the following recommendations are suggested:

## Objectives:

- 1. For the 1973-74 project year an objective should be added relating to following up the students who completed the program during the first year.
- 2. Since so many factors affect student achievement as illustrated by the Coleman Study and Olsen studies, "achievement gain" should not be considered but multiple regression analysis used to see what percentage of accountable variance related to achievement can be attributed to the intern.
- 3. For the 1973-74 project year a dissemination objective should be added relating to communicating the results to professional groups within and without the state.

#### Criterion instruments:

- 1. The use of a standarized achievement test should be reviewed. The content validity of such an instrument should be investigated. The objectives of the school district should be compared with those of the instrument. More up-to-date tests should be reviewed such as the new edition of the SAT, Metropolitan or one of the other major series.
- 2. Other non-cognitive or non-intellective tests should be used to measure other dimensions of change within the student environment with the implimentation of the cooperative teacher education program. Achievement Motivation, Self-Concept, Learning Style, Values, Psychomotor Development, School Environment are some of the categories that could be explored. Certain baseline data was collected on some of the group during the year.



3. Performance based examination pre-post video tapes of micro teaching performance, category ratings, etc. should be collected on a sample of project and non project students as supplementary to the traditional ratings and pencil paper examinations.

### Evaluation Design:

- 1. Pre and post should be administered to the interns and control group of Portland Gorham students and post-post tests secured on those who have completed the program.
- 2. MTAI results should be obtained from project and non project teachers as well as some other non intellective test and attitude scales.
- 3. The cognitive, affective, and psychomotor performance should be measured for both the project and non project classrooms. The design should include grades one and two as well as three through six.
- 4. Multiple regression analysis should be utilized as the statistical method of analysis rather than the use of "achievement gain scores."
- 5. Other dimensions of affective and cognitive behavior of the interns should be studied such as flexibility, empathy, cognitive ability, achievement in college, etc. with performance in the program, again using multiple regression analysis.

#### Program:

- 1. The council consisting of teachers, administrators, college staff and students is an excellent idea; nevertheless, performance objectives should be established for the group early in the year.
- 2. Copies of the evaluation report should be distributed to all the teachers, college and public school, involved in the program as well as to the project staff and appropriate divisions of the Department of Educational and Cultural Services.



- 3. Review of these recommendations should be made by the executive committee and council and the external evaluators should be invited to the session to review the evaluation procedure for the 1973-74 year to involve all groups in the evaluation strategy and to finalize the design.
- 4. A file should be kept on each objective and the evaluation evidence recorded in the central file so it is readily available to Title III and other external evaluators. A cumulative file should be kept on each student with ratings by the college supervisor and cooperating teachers included.
- 5. A performance based scale and other observational systems such as in MIRRORS OF BEHAVIOR should be considered for use either by the staff or outside observers to evaluate the students and classrooms involved in the project.
- 6. The experteese of the cooperating teachers and college personnel needs to be merged so that course and teaching experiences become more coordinated. College personnel need to spend more time in exchanging ideas with the master teachers involved in the program.



APPENDIX A



June \_

September

		Grade						
1.	I like school	l ne <b>v</b> er	2 sometimes	3 alot	ل always			
2.	Grown-ups pay attention to me in school	l never	2 sometimes	3 alot	4 always			
3.	My teachers understand me	l never	2 sometimes	3 alot	4 always			
4.	I like reading	l neve <b>r</b>	2 sometimes	3 alot	lı elways			
5.	I like science	l never	2 sometimes	3 alot	ل always			
6.	I like math	l never	2 sometimes	3 alot	4 always			
7.	I like social studies	l never	2 sometimes	3 alot	lı always			
8.	I like a <b>rt</b>	l never	2 sometimes	3 alot	4 always			
9.	I like playground	l . never	2 sometimes	3 alot	ل always			
10.	Grown-ups talk with me	1 never	2 sometimes	3 alot	4 always			
11.	I like school better than home	.l never	2 sometimes	3 alot	կ always			
1.2.	I get along well with the other kids	l never	2 sometimes	3 alot	4 always			
13.	I understand my school work	l never	2 sometimes	3 alot	l <sub>l</sub> always			
14.	I like to play sports	l never	2 sometimes	3 alot	alwaya 4			
15.	I like to sing	l. never	2 sometimes	3 alot	l; always			



16.	I like to dance	l never	2 sometimes	3 alot	always
17.	I like to cock	l never	2 sometimes	3 alot	4 always
18.	I am allowed to cook	$\begin{array}{c} {\tt l} \\ {\tt n}\epsilon {\tt ver} \end{array}$	2 sometimes	3 alot	4 always
19.	I eat breakfast	l never	2 sometimes	3 alot	always
20.	I cat most of my lunch	1 never	2 sometimes	3 alot	always
21.	I play with other childrεn at recess	l never	2 scmetimes	3 alot	4 always
22.	I like to do jobs for the teachers	l never	2 sometimes	3 alot	4 always
23.	I think grown-ups are trying to help me	1 nevεr	2 sometimes	3 alot	4 always
24.	I would like to have more than one grown-up in my room	l never	2 sometimes	3 alot	4 always
25.	I worry in school	l never	2 sometimes	3 alot	l <sub>t</sub> always
26.	Saturday & Sunday are my favorite days	1 never	2 scmetimes	3 alot	l <sub>t</sub> always
27.	My stomach feels furny in school	l never	2 sometimes	3 alot	l <sub>t</sub> always
28.	I feel like crying in school	1 never	2 sometimes	3 alot	<b>al</b> ways
<b>2</b> 9.	I am afraid in school	l never	2 sometimes	$_{ m alot}^{ m 3}$	l <sub>4</sub> always



30.	I bite my fingernails in school	1 never	2 sometimes	3 alot	4 always
31.	I wish I had more help with my work	1 never	2 sometimes	3 alot	4 always
32•	I wish someone would listen to me	l never	2 sometimes	3 alot	4 always
33.	In school I day dream	l never	2 sometimes	3 alot	ل alwqys
34.	I am afraid of grown-ups	l never	2 sometimes	3 alot	4 always
35.	I am afraid of children	l never	2 sometimes	3 alct	
36.	I am afraid of women	1 never	2 sometimes	3 alot	
37.	I am afraid of men	1 never	2 sometimes	3 alot	4 always
	I am afraid to go to the store	l never	2 sometimes		<b>a</b> lways
39•	I oversleep in the morning	l never	2 sometimes	3 alot	4 always
40.	I get confused by having more than one grown-up in my room	l never	2 sometimes	3 alot	4 always



Stu	dent_		
Sep	tember		May
Gra	de pla	cements .	<del></del>
Describe 2 specific ways in which a teacher classroom:	uses	nongrade	dness in a
			<del></del>
Describe 3 specific ways in which a teacher teaching practices:	parti	cipates :	in team
<u> </u>		<del></del>	
Describe 3 specific means of individualizing a child:	g the	learning	program for
· · · · · · · · · · · · · · · · · · ·			
\			



4.	Give 3 values and practical applications of TV in the classroom:
<b>5</b> .	Integrated Day:  a/ Describe the pupils role
	b/ Describe the teachers role
	c/ Describe the presentation of subject/skill matter
6.	List a typical hierarchy of differentiated staffing:
7∙	List 5 common learning disabilities and a very brief prescription for each:



8.	List 3 ways in which an environmental education program is correlated into a classroom program:
	5
y <sub>o</sub> ,	Describe the purpose of the following units in Burmer's, Man: A Course
	of Study:
	Gulls
	Salmon
	Baboons
	Eskimes



5 ap	Specific reading skills taught in elementary schools and practical plications of teaching them are:
_	
3	practical means of teaching arithmetic computation are:



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of ar	ithmet <b>ic</b> app	lications ar	'e:				
Three	means of tea	aching scien					
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mree	practical a	opileations		al studie	s are:		
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			<u>.</u>				· · · · · · · · · · · · · · · · · · ·
	3 practical m						

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Give 4 the sub	ways of jects:	correla	ating	langu	age a	rts	with	other	• <b>s</b> ubj	ects;	identi
	<del></del>						·		· ·		
					· · · · -						_
5 ways	of prese	nting	music	to el	ement	ta <b>r</b> y	scho	ol pup	ils a	re:	
<u> </u>								<i>-</i>			
	<u> </u>										
Give 5	p <b>ractic</b> a	al art	lessor	ns: _	<del></del>	<u> </u>	_	-			<del></del>



19.	5 practical methods of accomplishing the purposes of an elementary school physical education program are:									



APPENDIX C



In your undergraduate program of studies you have taken a number of required as well as elective courses to meet graduation and certification requirements. React to each item as to how helpful these courses have been in preparing you for teaching using the following scale in reacting to Items 1 to 45:

- Mark 1 if the course or area was of no value
- Mark 2 if the course or area was of little value
- Mark 3 if the course or area was of some value
- Mark 4 if the course or area was of great value
- Mark 5 if the course or area was of tremendous value

Note: Make no marks by the item on your separate answer sheet if you have not had the course.

- 1. Composition
- 2. Introduction to Literature
- 3. Topics in Literature
- 4. Modern Language (French, Spanish German)
- 5. Philosophy
- 6. Art
- 7. Music
- 8. Theater
- 9. Speech
- 10. Physical Science
- 11. Biological Science
- 12. Mathematics
- 13. Introduction to Psychology
- 14. Child Psychology
- 15. Adolescent Psychology
- 16. Educational Psychology
- 17. Political Science
- 18. Sociology
- 19. / Economics
- 20. American School
  - 21. Philosophy of Education
  - 22. History of Education
  - 23. Curriculum
  - 24. Teaching of Reading

- 25. Teaching of Mathematics
- 26. Teaching of Science/Health
- 27. Children's literature
- 28. Teaching of Art
- 29. Teaching of Music
- 30. Teaching of Physical Education
- 31. Teaching of Social Studies
- 32. Teaching Process
- 33. Measurement and Evaluation
- 34. Human growth & development
- 35. Physical Education
- 36. Pre-professional Experiences
- 37. Student Teaching
- 38. Junior year Internship
- 39. Independent study
- 40. Audio-visual aids
- 41. Western Civilization
- 42. American History
- 43. Your academic field
- 44. Diagnostic & Remedial Reading
- 45. Learning Disabilities

Directions: For items 46-52 mark the appropriate option on your separate answer sheet for each item.

- 46. Indicate your present class standing
  - 1. unclassified
  - 2. sophomore
  - 3. junior
  - 4. senior
  - 5. post-graduate
- 47. Indicate your major level of interest in education
  - 1. Nursery school and Kindergarten
  - 2. Grades one and two
  - 3. Grades 3, 4, 5
  - 4. Middle School 6, 7, 8
  - 5. High School
- 48. What is your approximate overall grade average at this University
  - 1. less than a C
  - 2. C average
  - 3. B average
  - 4. A average
- 49. Indicate the experience you have had in classroom teaching
  - 1. have taught
  - 2. have taught as a student teacher ) 5
  - 3. have been a teacher aid or tutor
  - 4. have not taught in any capacity
- 50. How sure are you of your decision to become a teacher
  - 1. will not be a teacher
  - 2. have not made a decision but intend to
  - 3. have made decision but unsure
  - 4. have made decision and very sure
- 51. Ratings such as these are a waste of time
  - 1. strongly agree
  - 2. mildly agree
  - 3. not sure
  - 4. mildly disagree
  - 5. strongly disagree
- 52. Your sex
  - 1. male
  - 2. female



APPENDIX D



#### ESEA EVALUATION REPORT

# GENERAL INFORMATION

Dates of Visitation: April 4, 5, 1973

Project Title: Cooperative Teacher Education Program

Local Educational Agency: SAD #71 Superintendent: Arther E. Hedberg, Jr.

Project Directors: Leo G. Martin, Daniel Calderwood, Melissa Costello

Current Budget Period: July 1, 1972 - June 30, 1973

Current Budget Amount: \$27,800

Visiting Team: Charles Lyons, Wil Morin, Dr. William Soule, Dr. Robert Drummond (chm.)

# SOURCES OF INFORMATION

1. Review of grant proposal, self evaluation report, continuation proposal

2. Interviews with project directors, interns, cooperating teachers, superintendent and some elementary pupils, participating university staff members

3. Inspection of project records

# NATURE OF PROJECT

The project is concerned with the preservice training of future teachers. Teacher trainees are placed in the school during their junior year and assigned to a classroom teacher who is their tutor. Their experience extends over the whole year and any courses required by the University are taught at the center. This affords the student a chance to transfer immediately theory and applications into practice. The project is designed to test a different approach to teacher training emphazing an exchange of ideas and knowledge between the public school practitioner and the university personnel. The process helps individualize the program for the student as well as helps renew learning on the part of the public school personnel, university faculty and students.

# OVERALL EFFECTIVENESS

# Objectives

The objectives were comprehensive and stated in performance terms. The committee was not able to assess fully the effectiveness of the project since post test data will not be available until the end of the school year. Impressions gained through interviews with the participants indicated that the project was on target and objectives were being met.

#### Personnel

The personnel involved were enthusiastic about the project and well qualified to meet the objectives. The lateness of the appointment of the business manager, however, has not allowed project personnel to have as much time to function as originally planned. It is hoped that next year University staff members participating in the project will have time as part of their regular load instead of an overload.



### Dissemination

The project should begin to set objectives and make plans for the dissemination of results. Communication within the project between the University personnel, school personnel and interns should be improved.

# BUDGET-FINANCE

The project financial records were being properly kept. The funding was adequate to accomplish program objectives.

# **EVALUATION**

The objectives gave indication of the criterion measures to be used. The evaluation procedure should parallel the objectives and activities. The project has accumulated base line data and the data is being processed and recorded. The results of the pretesting were not available as yet to the visitation team.

# SUMMARY COMMENTS

The evaluation team felt that the project presented the possibility for an interesting and exciting approach to teacher education and that the project should be continued another year.

The team saw the following as strengths of the project:

There was immediate application of experiences so that these became meaningful, important and relevant to the student. The process not only helped the student in learning the techniques and skills needed in teaching but also in having a better understanding of the prolitheral aspects of the classroom. Moreover, the experiences helped the student accomplish affective objectives such as developing positive attitudes toward teaching, children and school staff. Human relations skills were improved.

The experience in the junior year provided an opportunity for students to make career decisions about teaching, and appraise their strengths and weaknesses so that they could base their senior year program on immediate and realistic needs.

The extended experience of the intern provided more help to the classroom teacher in programming and meeting the needs of the pupils.

The committee also found certain general areas of concern: coordination, scheduling, utilization of personnel, resources, supervision, communication.

Therefore, the committee makes the following recommendations for consideration:

- 1. There needs to be developed a closer working partnership between teachers, interns, school administrators and university personnel. The relationship should be a triparte one in which there is interchange of ideas between and within groups so that more of a team approach can be established.
- 2. There needs to be increased upervision of interns in the program by school personnel and university staff.
- 3. Resources should be made available to the interns both by the University and by the school district. A professional library might be established at each school for the interns. A petty cash fund for materials might be made available to the students so that they can get the things they need immediately for school intructional projects.

